Report

Annual Report on Angel Investments
UPDATED VERSION

AGGREGATED NATIONAL & REGIONAL DATA

The **HALO Report**™ is a collaborative effort of the Angel Resource Institute™, Florida Atlantic University, and Pitchbook™ intended to raise awareness of early stage investment activities highlighting trends that may inform our decisions and impact opportunities for angels and entrepreneurs.







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HALO Report[™] Partners







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For more information about ARI, please visit **angelresource.org** ©2018 | Angel Resource Institute

Angel Group Update: Halo Report Annual 2018 Highlights & Trends

U.S. Angel Investing Activity

Background: For 2018, our U.S. Angel data set now includes 2,570 deals, excluding incubators. We agreed that while investments from incubators is important to characterize, and understand their activity and geographic influence, they do not reflect typical "angel" activity. In 2018, we also make a distinction between pre Series A (including Seed investments), and Series A, since some angel groups now lead Series A deals, if not participate actively in them. We also tracked deals where angels continue to invest in follow on rounds into Series B and beyond. We of course, did not include these later stage deals in any of the valuation or round size data. There are plenty of published sources for this kind of data. Our particular interest was in knowing the level of follow on activity from angels in Series B and beyond. Gathering this data however did lead us to add an additional 784 data points beyond the initial 1,786 for Seed and Series A deals.

Gender & Ethnicity: Most interesting to note is the rigorous analysis we did on gender and ethnicity. At least rigorous in sheer number of deals. Most of this effort was a manual process, with few groups tracking

and reporting this data. We now have enough data to be statistically significant. In fact we did not sample the deals but looked at every single company that reported to ARI and/or was captured by PitchBook data, that raised capital in 2018. What did we find?

Out of a total of 1786 known data points alone for Seed and Series A deals, 16% of Founders and 14% of CEO's are female, up from 13% aggregated in 2017. Because the differences reported by gender and ethnicity for founders vs. CEO's was remarkably similar, we focused, for simplicity of reporting these results, on understanding gender and ethnicity of CEO's of early stage companies, Seed, and Series A (combined), and Series B and beyond with additional data points from our follow on financing transactions from angels. A total of 784 additional data points. With a focus on CEO's, we then could see that male CEO's account for 84.9% of all CEO's, and female CEO's account for 15% of all CEO's in the Seed/Series A stages. Since our study this year did include Series A and Seed combined some of the increase in male CEO's as a percent of total may account for this difference. When we look at the gender of later stage company CEO's, however, we find a 1% increase in the number of male CEO's and a 1% corresponding decrease in the % of female CEO's.

However, with respect to ethnicity, we also found ethnic diversity relatively constant between founders and CEO's of pre Series A and Series A companies – at 19% of all companies. But when we considered more mature companies with a Series B or greater investment, only 12% of these companies had a CEO with a minority ethnicity.

In 2017 we noted amongst the early stage companies only 5.39% of all female founders and CEO's were of a minority ethnicity. While minority leaders of male founders/-CEO's was 20.4%. In 2018 with even more data, we found the diversity profile of only 3.6% of minority female CEO's, and 15% of CEO's ethnically diverse males. These numbers further decrease with Series B and later stage companies.

New Deals versus Follow-ons: anecdotal evidence of what you hear (and most likely witness firsthand) of a potential "bubble" in early-stage investing is showing up as a

Angel Group Update: Halo Report Annual 2018 Highlights & Trends Continued

shift in the ratio of "new" versus "follow-on" financings. At mid-year 2018, 52% were follow-on rounds, but now with a full year's worth of data, we see not only a higher number of new deals, but more dollars put to work as well. Our final numbers bring us to almost 59% of all deals as new, with 41% follow on deals.

You will also note that the % of new deals vs follow on deals nationally was influenced by California; 75% of deals in California were new investments. We definitely know the bubble of continued new company formation is leading to more deals, not necessarily of a large size, but newly funded companies.

Industry/sector preferences: to no one's surprise, once again "Information Technology/ Software" leads the way accounting for 38% of all investments. "Healthcare" (in all its manifestations) accounted for 19%, while B to B products and services slightly surpassed B to C products and services – a virtual tie at 18.36% and 18.14% respectively. This demonstrates a growing number of B to B business products and service investments relative to B to Consumer Products

and Services are capturing angel dollars.

Deal Structure: The historic proportionality between deals that are structured as preferred equity vs. convertible note investments appears to be holding ground. Of the deals where we know the security type, almost 57% used a preferred financing instrument (Seed and Series A combined), while 28% were standard convertible notes.

Only 2.7% of all deals were SAFE's and 4.6% "other". (Note: we combined these two categories for simplicity of presentation.) We still found 8.6% of investments were in Common Stock, but could not find an explanation. Some groups purchased common from founders looking for liquidity, but this type of transaction was not typically a reported investment. One unusual financial services deal required the investor to invest in common stock, but was an anomaly. We still seek those who chose to invest in common stock to elaborate on why. We may do more inquiry into the type of securities preferred and why.

We do note that in the popular Series Seed.com instruments, should a qualified financing not occur in a convertible note of a Series Seed, the capital converts into common. Our 8% for common may include these structures.

Valuations: We pushed for additional data points on valuation, and now are confident that Series Seed Pre Series A is indeed on average \$6.14M with a median Pre Money Valuation of \$5M. The average Pre Series A round size is \$1.43M, but the median is much smaller - \$703K. The average Angel Group Investment at the Seed stage is \$149K, with the median \$100K.

Series A deals have an average pre money valuation of \$13.1M with a median of \$10M. This average is more than \$1M higher than our mid-year report, closing the year with more highly valued deals Series A deals however have a modest Average round size of \$2.33M, and a median funding round of \$1M.

Leaders of the Pack: maintaining its leadership pace in sheer number of deals, the Houston Angel Network racked up an astounding 84 investment deals, which they reported for all of 2018. Please see the final

Angel Group Update: Halo Report Annual 2018 Highlights & Trends Continued

count of the top 10 most active Angel Groups reporting ranked by # of deals

Geographic Trends: California still carries the day with almost 19% of all companies funded residing in California, but down from 20.6% in 2017. Companies funded in Texas grew notably from 8.66% in 2017 to 11.4% in 2018. The Mid Atlantic region accounted for 8.82% in 2017 and rose to account for 14% in 2018.

Regional Borders: U.S. state and regional borders are permeable. But the difference in orientation of angels groups – towards staying close to home, vs venturing out of

region is dramatically different. Consider investors in NY are most aggressively investing outside NY state - 67% of all investments tracked were out of region vs 33% in region. NY state was followed by California angel investors who placed investments with companies outside their home state in 58% of the deals, with 42% staying within companies in the state. This is in stark contrast with angels based in the North West region, who stayed close to home with 92.5% of their deals within the region - and holding the record for regional focus - only 7.55% of their deals outside of their region. A similar pattern held for the North East, with 90% of investment staying

within the region.

The more we uncover, the more we want to learn about our early stage investing community. We look forward to your continued engagement as we continue to build on the Halo data set, and augment/refine based on your interests in particular

Please reach out directly to discuss any of the data. And kindly submit your data for the first half of 2019 by the end of the month to our team at research@angelresourceinstitute.org.

Data Validation & Methodology for 2018 HALO Report™

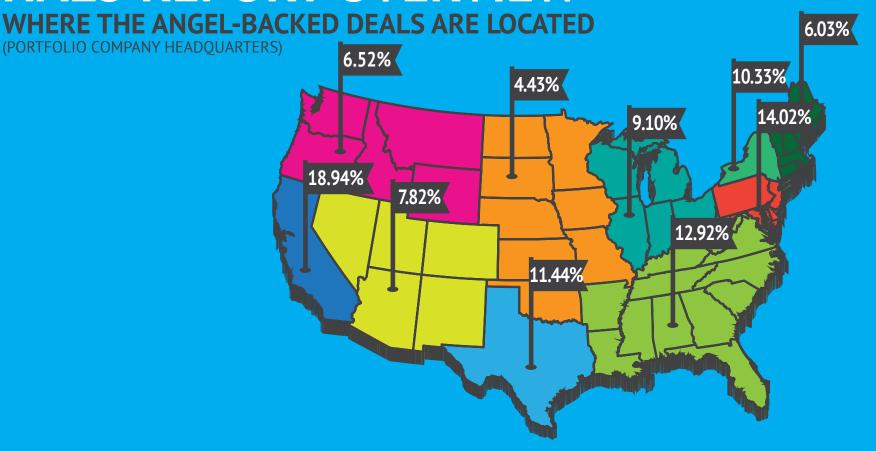
Angels and angel groups invest alone, together, and with many other types of investors. Unless otherwise noted, the 2018 HALO Report™ data includes funding rounds that have at least one angel group participating and may include other types of investors in those rounds. Note that "Median Angel Group Investment" is the median size of reported investments made by Angel groups in the reported deals. There are many groups that have the capability of making significantly larger investments; however, the 2018 data showed that many of these groups also invested smaller amounts of capital. It is important to note that the "Median Funding Round Size" includes investments from Angel groups and non-angel groups including venture capital funds and family offices.

This report discusses angel group investment trends for 2018, representing more than 2,500 deals. Data was sourced directly from angel groups through the Angel Resource Institute's data portal (www.arihaloreport.com), via email, from

direct conversations with group leaders or their administrators, and via PitchBbook. Additional data was collected from individual angels but is not included in this report.

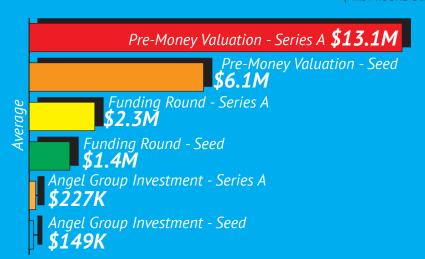
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HALO REPORT OVERVIEW



FINANCIAL TERMS OF ANGEL INVESTMENTS

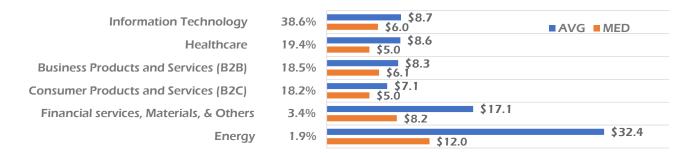
(FIRST ROUND DEALS, AGNOSTIC TO GEOGRAPHY AND INDUSTRY)





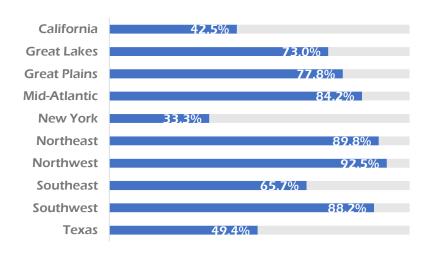
INDUSTRIES ANGELS LIKE

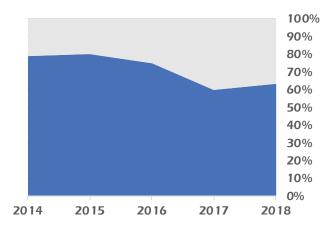
(Average & Median Pre-Money Valuation in Millions, Seed & Series A combined))



PERCENTAGE DEALS IN REGION

(Known Deals; By Region, Overall Historical)





DEAL STRUCTURE

(PERCENTAGE OF DEALS)

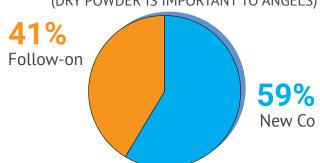
PREFERRED CONVERTIBLE

COMMON STOCK

SAFE, DEBT,

NEW OR FOLLOW-ON?

(DRY POWDER IS IMPORTANT TO ANGELS)

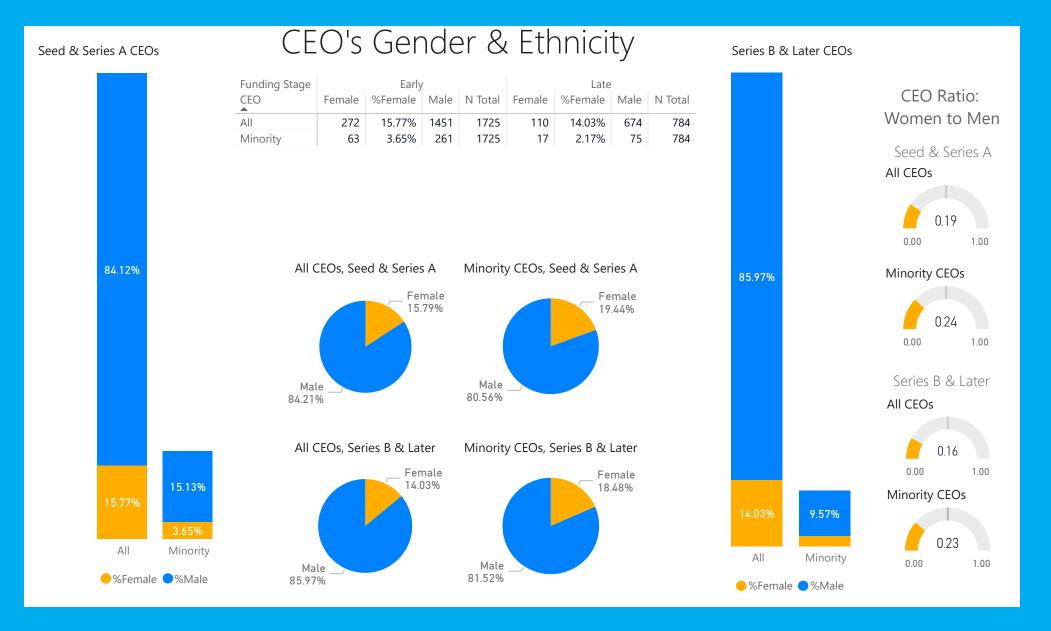


TOP ANGEL GROUPS RANKED BY # OF DEALS

- 1. Houston Angel Network
- 2. Keiretsu Forum
- 3. Ben Franklin Technology Partners
- 4. Alliance of Angels
- 5. Pasadena Angels
- 6. Golden Seeds
- 7. New York Angels
- 8. Robin Hood Ventures
- 9. St. Louis Arch Angels
- 10. Maine Angels



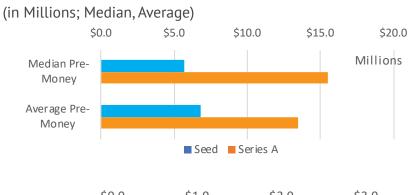
NATIONAL DATA





CALIFORNIA

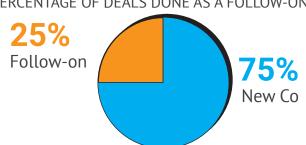
VALUATION & INVESTMENT SIZE





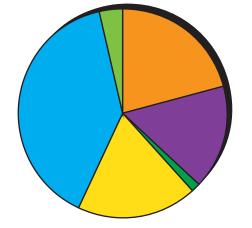
NEW OR FOLLOW-ON?

(PERCENTAGE OF DEALS DONE AS A FOLLOW-ON)



REGIONAL INDUSTRY

(PERCENTAGE OF DEALS IN THE REGION)



- Business Products & Services (20.90%)
- Consumer Products & Services (16.12%)
- **Energy (1.49%)**
- **☐** Healthcare (18.51%)
- Information Technology (39.40%)
- Financial Services, Materials, Other (3.58%)

DEAL STRUCTURE

(PERCENTAGE OF DEALS)

PREFERRED STOCK CONVERTIBLE NOTE

9%

COMMON, SAFE, DEBT, OTHER

7%



Most Active Groups in Region

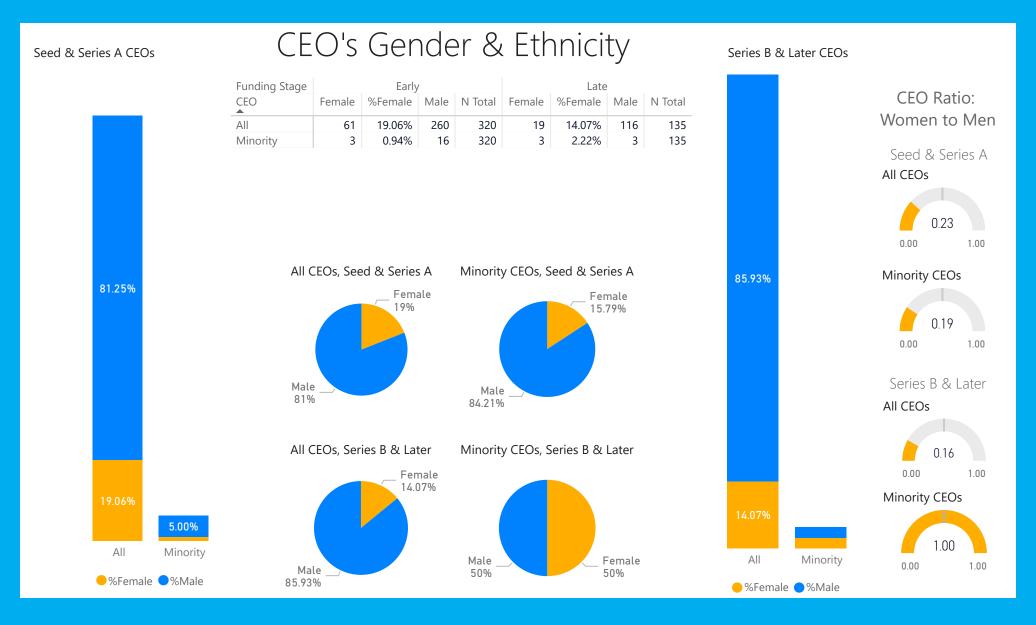


(Ranked by number of investments or deals reported in the region)

Pasadena Angels Houston Angel Network Keiretsu Forum Life Science Angels Golden Seeds Astia Angels



CALIFORNIA





GREAT LAKES

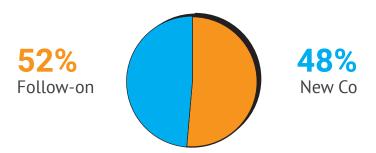
VALUATION & INVESTMENT SIZE

(IN MILLIONS; MEDIAN, AVERAGE)



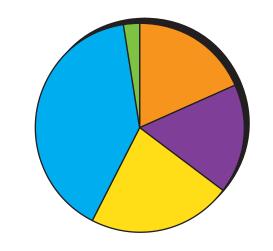
NEW OR FOLLOW-ON?

(PERCENTAGE OF DEALS DONE AS A FOLLOW-ON)



REGIONAL INDUSTRY

(PERCENTAGE OF DEALS IN THE REGION)



- Business Prod & Svcs (B2B) (18.46%)
- Cons Prod & Svcs (B2C) (16.92%)
- **Energy (0.00%)**
- **☐** Healthcare (22.31%)
- Information Technology (40.00%)
- Fin Svcs, Materials, & Others (2.31%)

DEAL STRUCTURE

(PERCENTAGE OF DEALS)

PREFERRED STOCK CONVERTIBLE NOTE

17%

COMMON, SAFE, DEBT, OTHER



Most Active Groups in Region

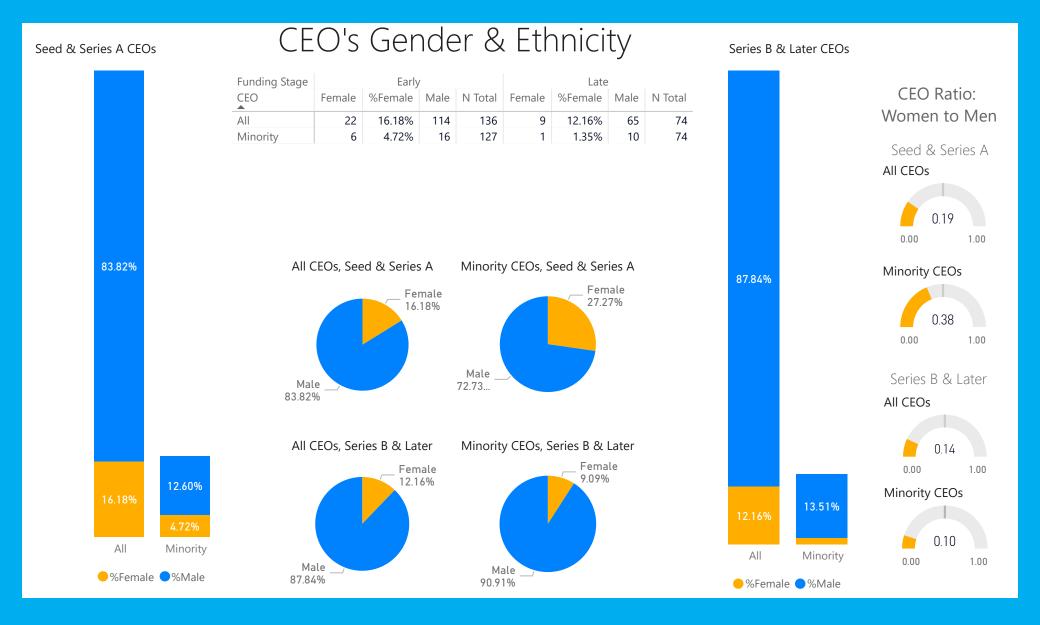


(Ranked by number of investments or deals reported in the region)

IrishAngels Michigan Angel Fund Grand Angels Hyde Park Angels Drummond Road Capital



GREAT LAKES





GREAT PLAINS

VALUATION & INVESTMENT SIZE

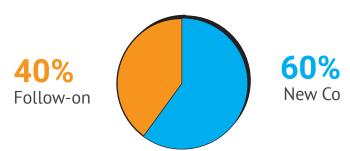
(IN MILLIONS; MEDIAN, AVERAGE)





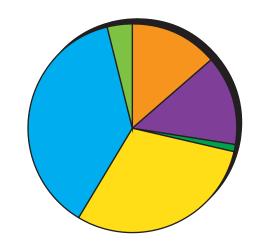
NEW OR FOLLOW-ON?

(PERCENTAGE OF DEALS DONE AS A FOLLOW-ON)



REGIONAL INDUSTRY

(PERCENTAGE OF DEALS IN THE REGION)





- Cons Prod & Svcs (B2C) (13.75%)
- **Energy (1.25%)**
- Healthcare (30.00%)
- Information Technology (37.50%)
- Fin Svcs, Materials, & Others (3.75%)

DEAL STRUCTURE

(PERCENTAGE OF DEALS)

PREFERRED C

CONVERTIBLE NOTE

50%

8%

SAFE, DEBT, OTHER



Most Active Groups in Region

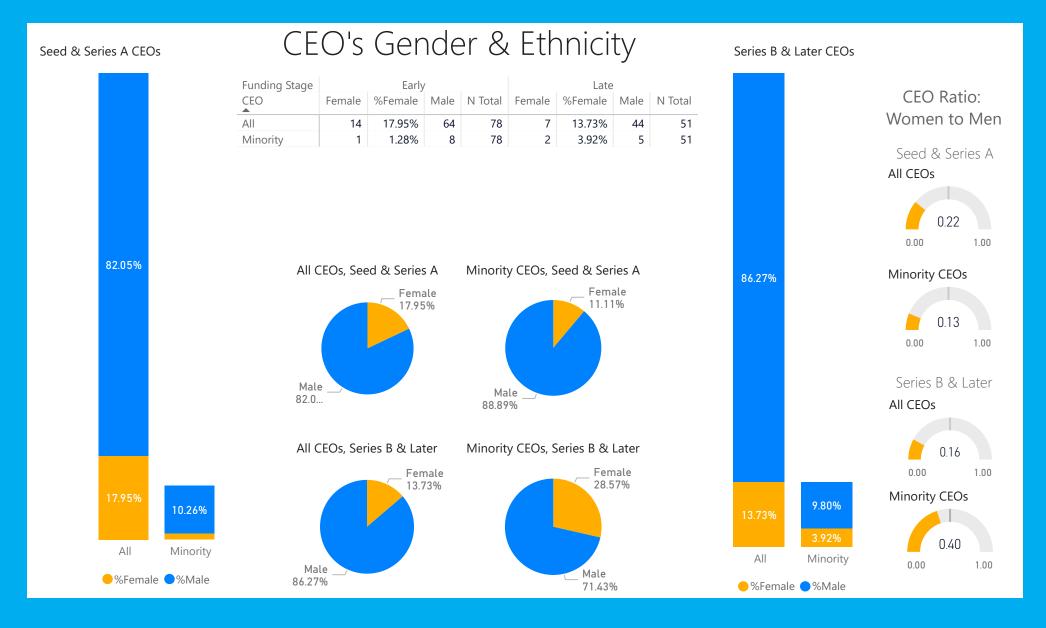


(Ranked by number of investments or deals reported in the region)

St. Louis Arch Angels Keiretsu Forum IrishAngels Houston Angel Network



GREAT PLAINS





MID-ATLANTIC

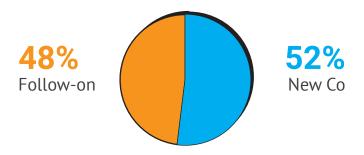
VALUATION & INVESTMENT SIZE

(IN MILLIONS; MEDIAN, AVERAGE)



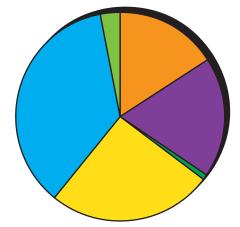
NEW OR FOLLOW-ON?

(PERCENTAGE OF DEALS DONE AS A FOLLOW-ON)



REGIONAL INDUSTRY

(PERCENTAGE OF DEALS IN THE REGION)



- **■** Business Prod & Svcs (B2B) (16.00%)
- Cons Prod & Svcs (B2C) (18.50%)
- **Energy (1.00%)**
- **☐** Healthcare (25.50%)
- Information Technology (36.00%)
- Fin Svcs, Materials, & Others (3.00%)

DEAL STRUCTURE

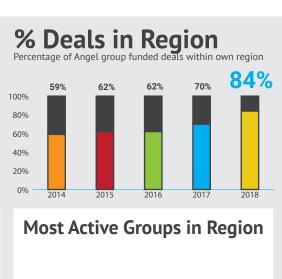
(PERCENTAGE OF DEALS)

PREFERRED STOCK CONVERTIBLE NOTE

25%

12

COMMON, SAFE, DEBT, OTHER



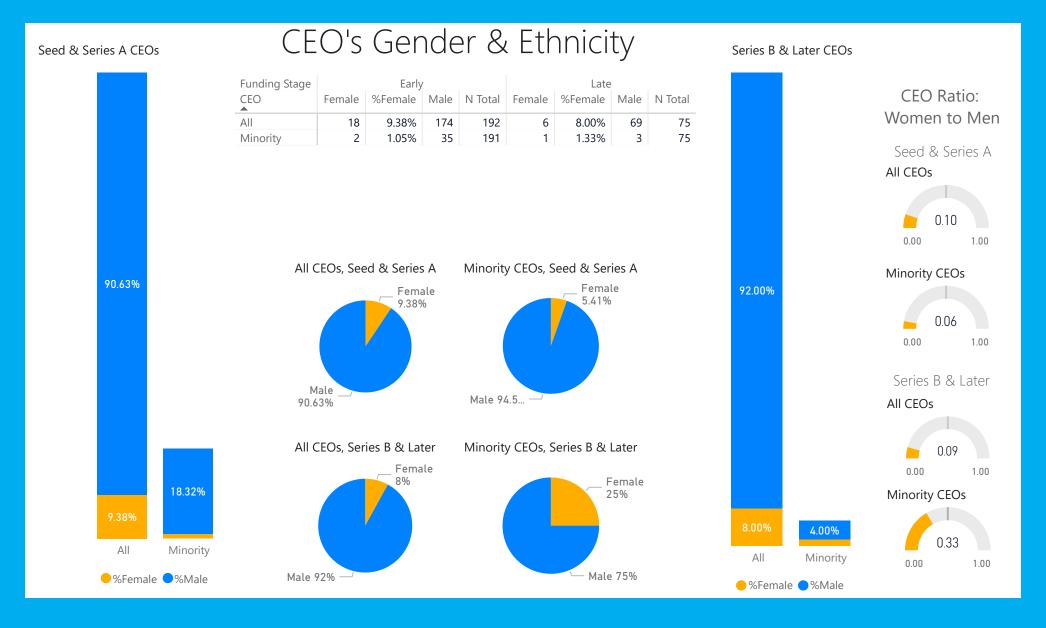


(Ranked by number of investments or deals reported in the region)

Ben Franklin Technology Partners Robin Hood Ventures BlueTree Allied Angels Blu Venture Investors



MID-ATLANTIC





NEW YORK

VALUATION & INVESTMENT SIZE

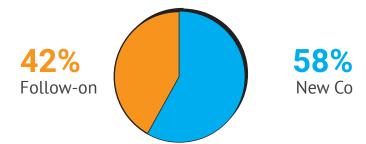
(IN MILLIONS; MEDIAN, AVERAGE)





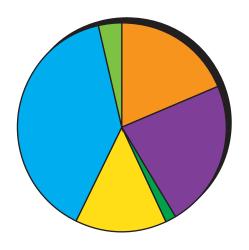
NEW OR FOLLOW-ON?

(PERCENTAGE OF DEALS DONE AS A FOLLOW-ON)



REGIONAL INDUSTRY

(PERCENTAGE OF DEALS IN THE REGION)



- **■** Business Prod & Svcs (B2B) (18.71%)
- Cons Prod & Svcs (B2C) (22.81%)
- **Energy (1.75%)**
- **☐** Healthcare (14.04%)
- Information Technology (39.18%)
- Fin Svcs, Materials, & Others (3.51%)

DEAL STRUCTURE

(PERCENTAGE OF DEALS)

PREFERRED STOCK

CONVERTIBLE NOTE

37%

COMMON, SAFE, DEBT, OTHER



Most Active Groups in Region

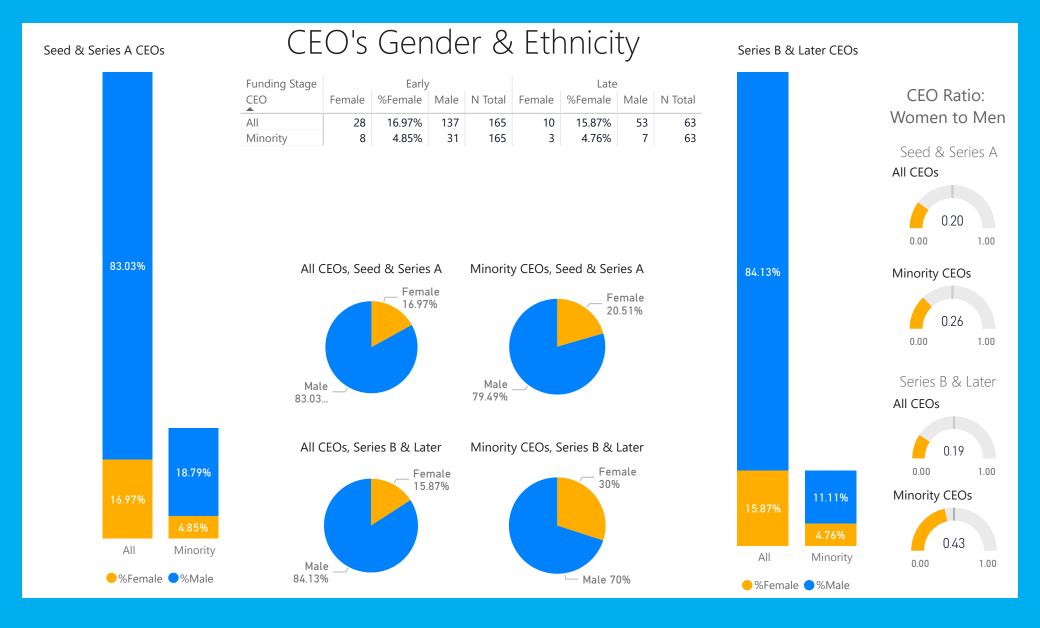


(Ranked by number of investments or deals reported in the region)

New York Angels Golden Seeds Houston Angel Network Keiretsu Forum



NEW YORK





NORTHEAST

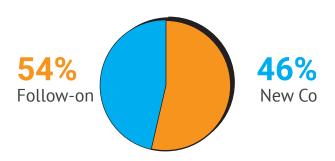
VALUATION & INVESTMENT SIZE

(IN MILLIONS; MEDIAN, AVERAGE)



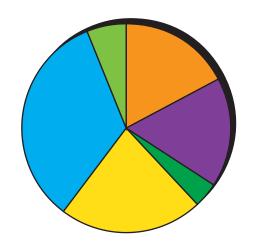
NEW OR FOLLOW-ON?

(PERCENTAGE OF DEALS DONE AS A FOLLOW-ON)



REGIONAL INDUSTRY

(PERCENTAGE OF DEALS IN THE REGION)



- **■** Business Prod & Svcs (B2B) (17.45%)
- Cons Prod & Svcs (B2C) (16.78%)
- **Energy (4.03%)**
- **☐** Healthcare (22.15%)
- ☐ Information Technology (33.56%)
- Fin Svcs, Materials, & Others (6.04%)

DEAL STRUCTURE

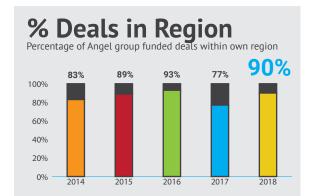
(PERCENTAGE OF DEALS)

PRFFFRRFD STOCK

CONVERTIBLE NOTE

25%

COMMON, SAFE, DEBT, OTHER



Most Active Groups in Region

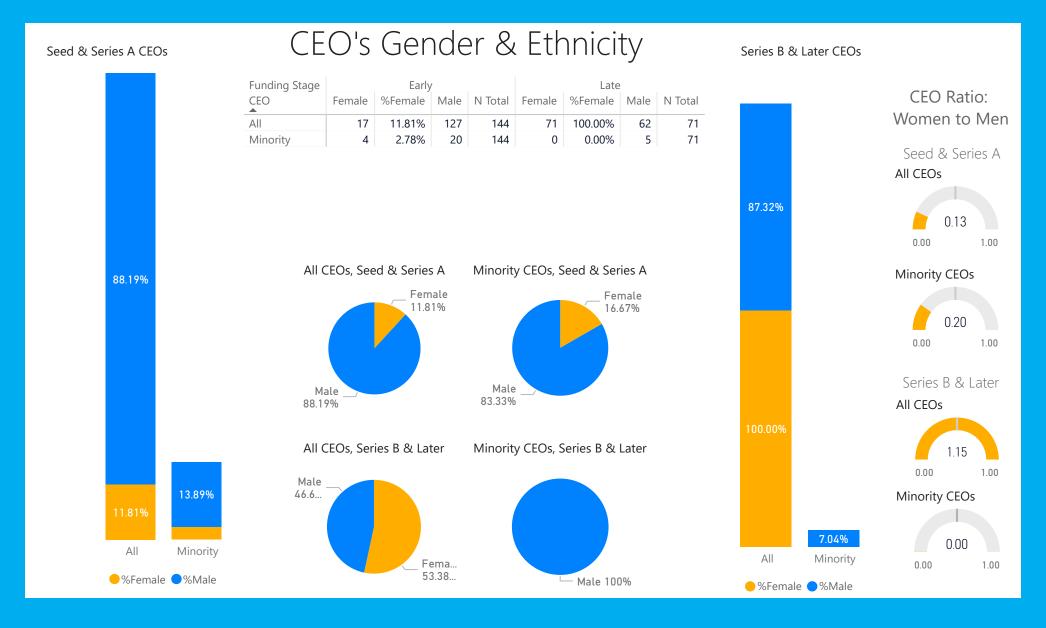


(Ranked by number of investments or deals reported in the region)

Maine Angels Hub Investment Group Golden Seeds Robin Hood Ventures



NORTHEAST





NORTHWEST

VALUATION & INVESTMENT SIZE

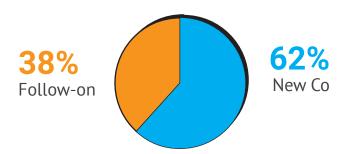
(in Millions; Median, Average)





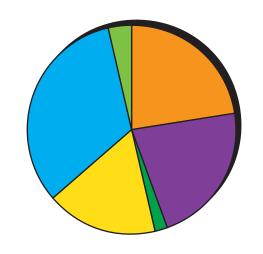
NEW OR FOLLOW-ON?

(PERCENTAGE OF DEALS DONE AS A FOLLOW-ON)



REGIONAL INDUSTRY

(PERCENTAGE OF DEALS IN THE REGION)





- Cons Prod & Svcs (B2C) (22.02%)
- **Energy (1.79%)**
- Healthcare (17.26%)
- Information Technology (32.74%)
- Fin Svcs, Materials, & Others (3.57%)

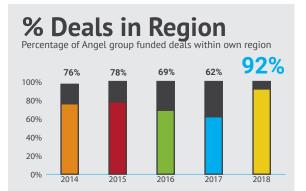
DEAL STRUCTURE

(PERCENTAGE OF DEALS)

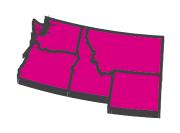
PREFERRED STOCK CONVERTIBLE NOTE

12%

COMMON, SAFE, DEBT, OTHER



Most Active Groups in Region

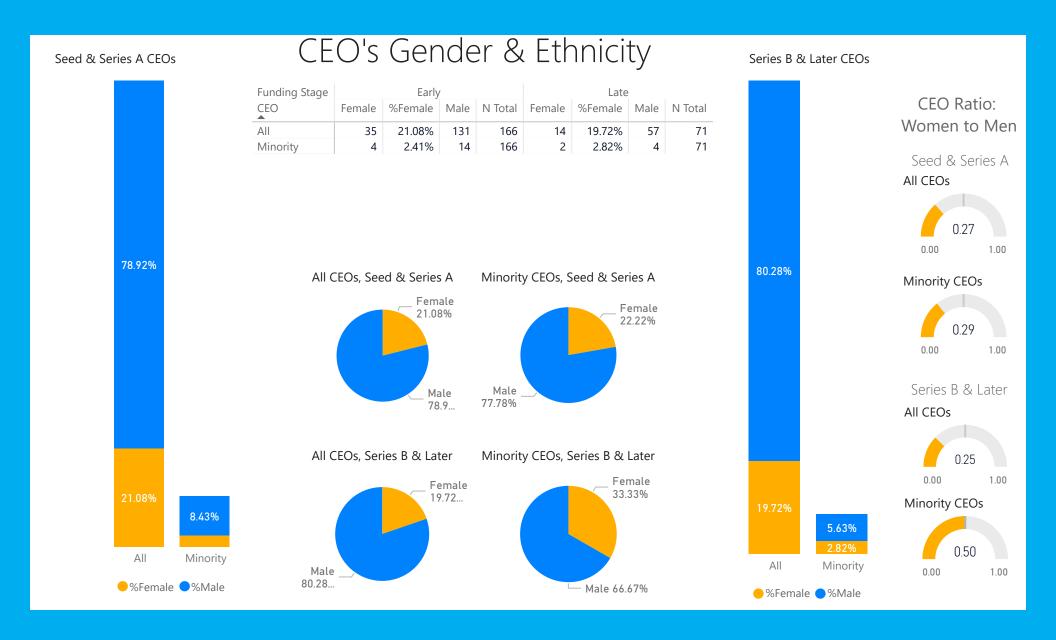


(Ranked by number of investments or deals reported in the region)

Alliance of Angels Keiretsu Forum SeaChange Fund IV Golden Seeds



NORTHWEST

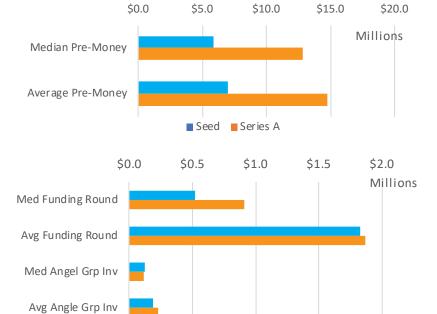




SOUTHEAST

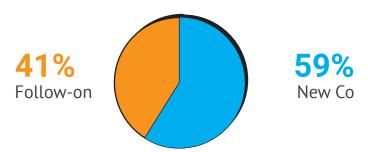
VALUATION & INVESTMENT SIZE

(IN MILLIONS; MEDIAN, AVERAGE)



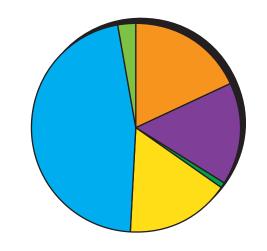
NEW OR FOLLOW-ON?

(PERCENTAGE OF DEALS DONE AS A FOLLOW-ON)



REGIONAL INDUSTRY

(PERCENTAGE OF DEALS IN THE REGION)



- Business Prod & Svcs (B2B) (18.12%)
- Cons Prod & Svcs (B2C) (15.94%)
- **Energy (0.72%)**
- Healthcare (16.30%)
- Information Technology (46.38%)
- Fin Svcs, Materials, & Others (2.54%)

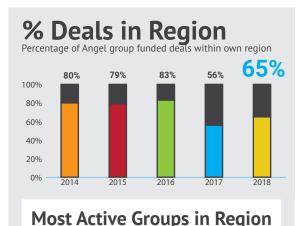
DEAL STRUCTURE

(PERCENTAGE OF DEALS)

PREFERRED STOCK CONVERTIBLE NOTE

37%

COMMON, SAFE, DEBT, OTHER



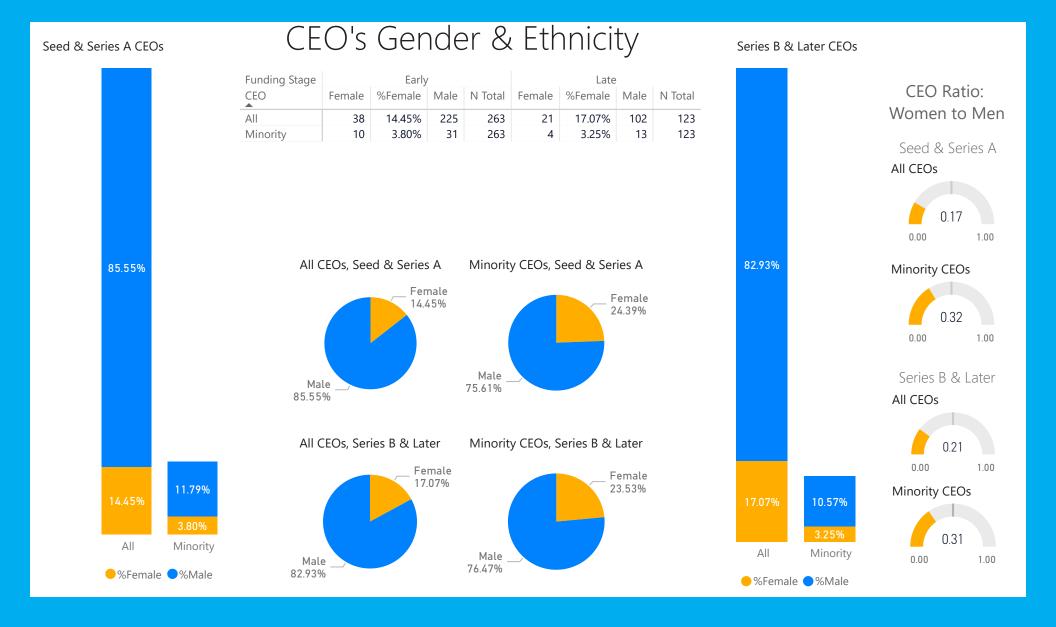


(Ranked by number of investments or deals reported in the region)

Charlottesville Angel Network Blu Venture Investors New World Angels JumpFund



SOUTHEAST





SOUTHWEST

VALUATION & INVESTMENT SIZE

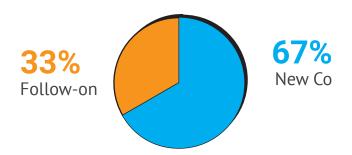
(IN MILLIONS; MEDIAN, AVERAGE)





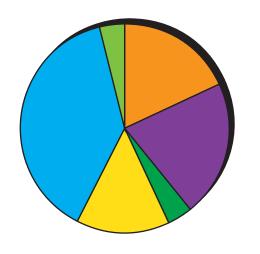
NEW OR FOLLOW-ON?

(PERCENTAGE OF DEALS DONE AS A FOLLOW-ON)



REGIONAL INDUSTRY

(PERCENTAGE OF DEALS IN THE REGION)



- Business Prod & Svcs (B2B) (18.25%)
- Cons Prod & Svcs (B2C) (21.17%)
- **Energy (3.65%)**
- **☐** Healthcare (14.60%)
- Information Technology (38.69%)
- Fin Svcs, Materials, & Others (3.65%)

DEAL STRUCTURE

(PERCENTAGE OF DEALS)

PREFERRED STOCK CONVERTIBLE NOTE

33%

7%

COMMON, SAFE, DEBT, OTHER



Most Active Groups in Region

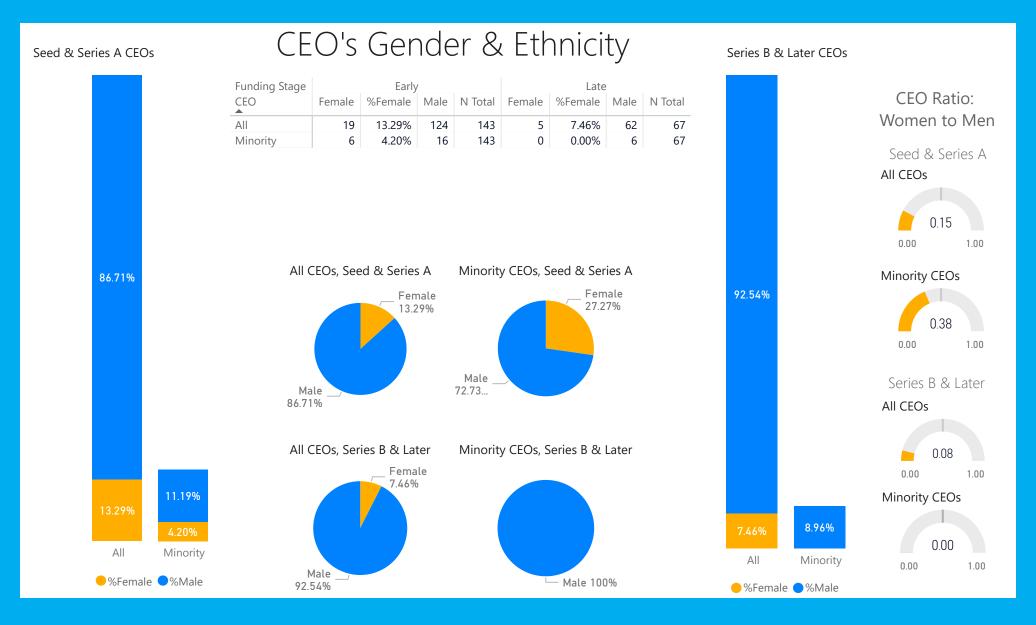


(Ranked by number of investments or deals reported in the region)

Rockies Venture Club Desert Angels



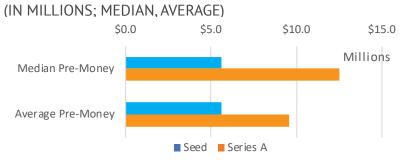
SOUTHWEST





TEXAS

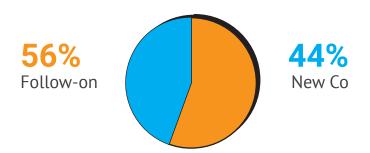






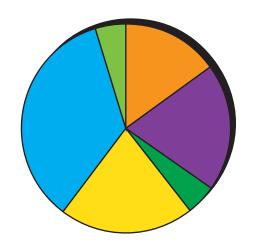
NEW OR FOLLOW-ON?

(PERCENTAGE OF DEALS DONE AS A FOLLOW-ON)



REGIONAL INDUSTRY

(PERCENTAGE OF DEALS IN THE REGION)





- Cons Prod & Svcs (B2C) (19.81%)
- **Energy (4.72%)**
- **☐** Healthcare (20.75%)
- Information Technology (34.91%)
- Fin Svcs, Materials, & Others (4.72%)

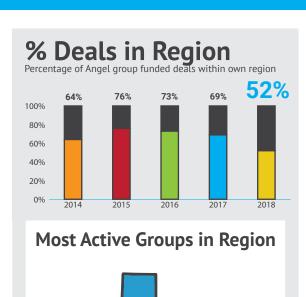
DEAL STRUCTURE

(PERCENTAGE OF DEALS)

PREFERRED STOCK CONVERTIBLE NOTE

36%

COMMON, SAFE, DEBT, OTHER

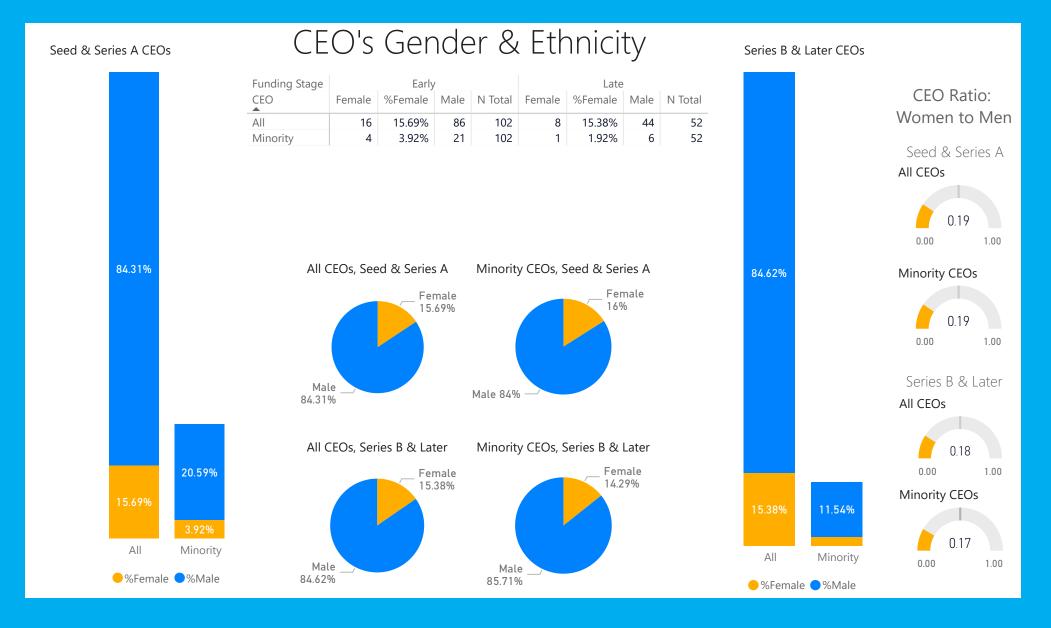




Houston Angel Network Keiretsu Forum



TEXAS

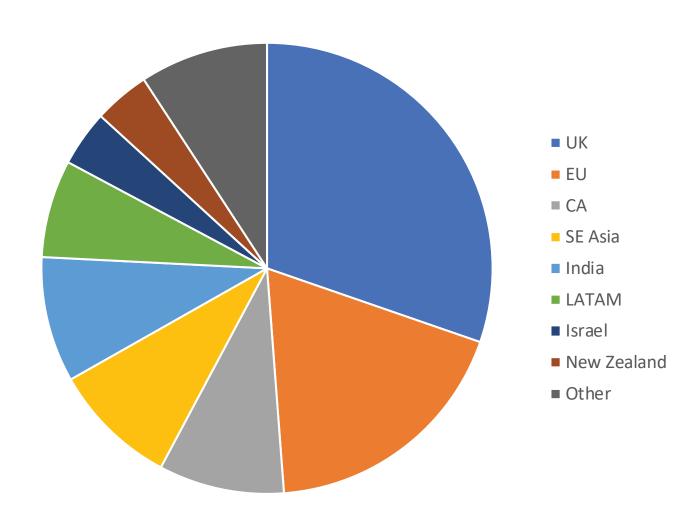


GLOBAL TRENDS

We received information on 77 deals that were investments made by US angels outside of the United States. While the N is small, the results are interesting. For example we are all aware of the growing opportunity for investments in South East Asia including China, the EU, and LATAM. But it appears that a these opportunities are sought more by institutions or family funds than angels. And when angels do invest outside of the US, almost half of these investments are in the UK and FU combined.

We expected to see more investing in the Pacific Rim, Mexico/LATAM, and Canada as a percent of the total. Again the N is small, and we may see this shift over time. It indeed appears that angel investing still starts closer to home, with less than 5% of reported investments exceptions to this rule

International Deals (Outside of US: 76 known, 4.2% of total)



THE HALO REPORT™

The **2018 HALO Report**™ provides early-stage investors and entrepreneurs with the most comprehensive data and associated analysis, resulting in an enhanced understanding of how startups are funded.

About the HALO Report[™]

The HALO Report™ provides analysis and trends on the US angel community and angel group activity. Angels and angel groups invest alone, together, and with many other types of investors. The HALO Report™ data includes all rounds that do not exceed \$4M in size, have at least one angel group participating, and may include other types of investors in those rounds. The ceiling governing round size for 2018 deals may be raised, in an effort to track larger follow-on rounds in which angel participation is present.

Angel Resource InstituteTM (ARI) The Angel Resource Institute (ARI) is a 501(c)(3) charitable organization devoted to education, mentoring and research in the field of angel investing. ARI was founded by the Ewing Marion Kauffman Foundation in 2005 to serve the research and educational needs of the angel community. The programs of ARI include educational workshops and seminars, research projects and reports, and information about angel investing for the general public. ARI also provides

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Florida Atlantic University

Florida Atlantic University & FAU Tech Runway® support the HALO Report™ by working closely with the Angel Resource Institute, providing insight and analysis from finance and entrepreneurship professors, as well as significant staff support.

More information is available at: www.fau.edu/research/tech-runway/index.php.



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